

Attorney Docket No. 825-162

In the specification:

Please add the following paragraph at page 1, between the title and the first line of text as follows:

CROSS REFERENCE TO RELATED APPLICATION

The present application is the U.S. national stage application of International Application PCT/EP00/08085, filed August 18, 2000, which international application was published on February 22, 2001 as International Publication WO 01/12988 A1 in the German language. The International Application claims priority of German Patent Application 199 39 130.0, filed August 18, 1999.

Before the paragraph starting on line 15 of page 1, insert the following:

Such an axial piston drive is known, for example from the patent US 3,304,886.

It is also known that axial piston drive with a continuously adjustable piston stroke can be used in particular for air conditioners in motor vehicles, specifically as coolant condensers.

Delete the paragraph starting at line 15 of page 1 as follows:

The use of axial piston drive with a continuously adjustable piston stroke is known in particular for motor vehicle air conditioners, where they serve as coolant condensers.

Paragraph starting on line 31 of page 1 has been amended as follows:

The output of the coolant condenser can be continuously adjusted by way of the speed of a drive motor and in an especially energetically favourable manner, in the case of axial piston drive, by way of the piston stroke. Known axial piston drive or axial piston condensers for vehicle air conditioners comprise a drive shaft operated by way of a pulley. Within a crank chamber a swash plate is supported on the drive shaft so that it is unrotably



fixed and can be tilted by way of a joint. The swash plate drives at least one piston that can move within a cylinder. In order to absorb tractive and pressure loads, each such piston is connected to the swash plate by way of two hinge yoke, one at the bearing surface of the swash plate that faces the piston and the other at the surface that faces away. With their flat surfaces contacting the bearing surfaces of the swash plate, the hinge yoke run at full circumferential velocity with a superimposed radial movement, which results in an elliptical track. The hinge yoke are seated with their rounded surfaces in sphere shaped formed bearings of the pistons, within which there is comparatively little relative movement during operation.

The output of the coolant condenser can be continuously adjusted by way of the speed of a drive motor and in an especially energetically favourable manner, in the case of axial piston drive, by way of the piston stroke. Known axial piston drive or axial piston condensers for vehicle air conditioners comprise a drive shaft operated by way of a pulley, within a crank chamber a swash plate is supported on the drive shaft so that it is unrotatably fixed and can be tilted by way of a joint. The swash plate drives at least one piston that can move within a cylinder. In order to absorb tractive and pressure loads, each such piston is connected to the swash plate by way of two hinge yoke, one at the bearing surface of the swash plate that faces the piston and the other at the surface that faces away. With their flat surfaces contacting the bearing surfaces of the swash plate, the hinge yoke run at full circumferential velocity with a superimposed radial movement, which results in an elliptical track. The hinge yoke are seated with their rounded surfaces in sphere shaped formed bearings of the pistons, within which there is comparatively little relative movement during operation.

In the claims:

Claim 1 has been amended as follows:

1. Axial piston drive with a continuously adjustable piston stroke, which comprises a drive shaft (10, 12, 170) and a swash plate (16, 18, 174) disposed in a bearing seat (14) that is positioned at a first tilt angle (22) with respect to the longitudinal direction (20) and on which the swash plate (16, 18, 174) is supported within a crank



chamber (24), with a bore of bearing (30) that is tiled by a second tilt angle (28) with respect to the perpendicular line (26) of the swash plate (16, 18, 174), said swash plate (16, 18, 174) being rotatable through a range of angles by means of a controller (32, 34) in order to adjust the piston stroke, and also comprises at least one piston (44, 46, 48, 50) movably disposed in a cylinder (36, 38, 40, 42) and connected to the swash plate (16, 18, 174) so as to be driven thereby,

characterized in that <u>coupled to or superimposed upon</u> onto the rotational movement from a maximal resulting tilt angle (52) to the minimal resulting tilt angle (54) there is <u>superimposed</u> an axial stroke movement (56) of the swash plate (16, 18, 174) in the direction towards the piston (44, 46, 48, 50), and <u>coupled to or superimposed upon</u> onto the rotational movement from the minimal resulting tilt angle (54) to the maximal resulting tilt angle (52) there is <u>superimposed</u> an axial stroke movement (116) of the swash plate in the direction away from the piston (44, 46, 48, 50).

Claim 4 has been amended as follows:

Axial piston drive according to one of the preceding claims claim 1,

characterized in that when turned through an angle of 180°, the swash plate (16, 18, 174) is shifted axially by a distance amounting to half a maximal piston stroke (60).

Claim 5 has been amended as follows:

Axial piston drive according to one of the claims 2 to 4 claim 1, characterized in that the swash plate (174) is rotatably seated in an axially sliding sleeve (178).

Claim 6 has been amended as follows:

Axial piston drive according to one of the preceding claims claim 1, characterized in that the controller (32) comprises a counterforce mechanism with at least one prestressed torsion spring (62, 64, 66, 68) that acts on the swash plate (16, 174).



Claim 7 has been amended as follows:

Axial piston drive according to one of the preceding claims claim 1, characterized in that the controller (34) comprises an adjustment unit (70) that is separate from the piston (44, 46, 48, 50).